

DETAILED ACTION

Claims 14 through 21 were omitted and claim 60 and 61 were canceled from this application by applicant. Claims 1-13 and 22 through 59 and 62-65 are considered for examination.

Examiner notes that the preliminary amendment fails to comply with 37 CFR 1.121 in that the status identifiers of claims 14-21 are not recognized and the examiner have treated the claims as having been canceled. Any future amendments must comply with 37 CFR 1.121 including proper status identifiers.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character:
 - “90” has been used to designate both lip and upstanding side walls in the detail description for Figure 1.
 - “42” has been used to designate both “an upper capping” and “Gasket?” in Fig.1

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended.

Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 25-59, 61-65 are objected to because of the following informalities:
Claims 25-59, 61-65 recites the limitation "upper capping" in the independent claims and "capping" in the dependent claims. There is improper antecedent basis for the limitation of "capping". It is unclear if "capping" should refer to both the upper and lower or just upper. Appropriate correction is required.
3. Claim 22 objected to because of the following informalities:
Claim 22 recites the limitation "A glazing bar". There is improper antecedent basis for this limitation in the claim. Appropriate correction is required.
4. Claim 53 objected to because of the following informalities:
claim 53 recites the limitation "the ducts". There is insufficient antecedent basis for this limitation in the claim. It is unclear if the term "ducts" is referring to chambers. Claims would be examined as best understood. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 8-13, 22-28, 31-38, 42-43, 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Richardson (U.S. Publication No. 2001/0029708).
7. Regarding claim 1, Richardson discloses in Fig. 2 a capping (32, 34) of plastics material for location on a structural member (30) of a conservatory roof wherein the capping is twin-walled (60, 63) and has means for location (69) thereof on the structural member.
8. Regarding claim 25, Richardson discloses a glazing bar (30) and an upper capping (32) therefore and means for locating (69) the capping on the glazing bar, the glazing bar having a stem (48) and a lateral flange means for supporting (40) roofing panels (24) directly or indirectly, and wherein the upper capping comprises at least a twin wall construction (60,63).
9. Regarding claim 2, Richardson discloses a structural member as being a glazing bar (30).
10. Regarding claims 3 and 26, Richardson discloses multiple walls (60, 63) with spacing webs (65).
11. Regarding claims 4 and 27, Richardson discloses a capping that has twin wall

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construction that has an inner (Inner Wall) and outer wall (Outer Wall) having a plurality of spaced webs (65) extending there between to divide the twin wall construction into a plurality of chambers. The examiner notes that the limitation of "to divide..." is intended use language and considers the and considers the spacing webs of Richardson to meet the limitations.

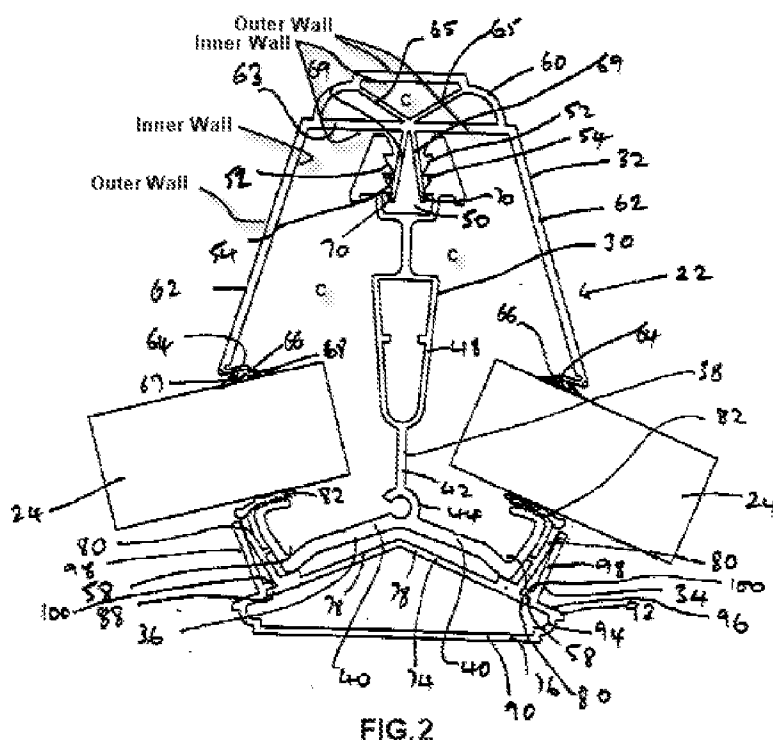
12. Regarding claims 5 and 28, Richardson discloses additional walls (62) to form further chambers ("C").
13. Regarding claims 8 and 31, Richardson discloses a capping that has a top (60) and two depending sides (62).
14. Regarding claims 9 and 32, Richardson discloses a gasket along the edges (66) for sealing on roofing panels retained on the glazing bar.
15. Regarding claims 10 and 33, Richardson discloses the edges (64) of the depending sides (62) of the capping (32, 34) extend between the ends on the inner and outer walls of the capping.
16. Regarding claims 11 and 34, Richardson discloses a gasket (66) that forms part of the edge (64) that spans the gap between the ends of the inner and outer walls. The examiner considers the gap to be the thickness of the wall of the capping that separates the inner and outer wall with the gasket spanning the length.
17. Regarding claims 12 and 35, Richardson discloses a gasket that includes a body (64) connecting with the capping and lips (67,68) which brand from the body and engages the roofing panel (24).

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18. Regarding claims 13 and 36, Richardson discloses an inner wall (Inner wall) that terminates at a greater distance from the roof panel (24) than the outer wall so that the gasket is at least partially concealed by the outer wall (Outer Wall).
19. Regarding claim 22, Richardson discloses projections (78, 40) that extend up to a stem (48).
20. Regarding claim 23, Richardson discloses internal projections (78, 40). The examiner notes that the limitation “to sub-divide space below the capping” is intended use language and consider the projections disclosed by Richardson capable of meeting the limitation.
21. Regarding claim 24, Richardson discloses projections (78, 40) that are arcuate in cross section.
22. Regarding claim 37, Richardson discloses a lower capping (34) that is of multiple wall construction (74, 76).
23. Regarding claim 38, Richardson discloses a lower capping (34) that is of twin wall construction (98, 90).
24. Regarding claim 42, Richardson discloses in paragraph [0010] a lower capping that includes a means for locating (82) the lower capping (34) with respect to a glazing bar (30).
25. Regarding claim 43, Richardson discloses in paragraph [0028] end edges (Free Edges) of the lower capping (34) that carry respective gaskets (82) to engage with the underside of the roofing panels (24).
26. Regarding claim 52, Richardson discloses in Fig. 2 a glazing bar (30) and an

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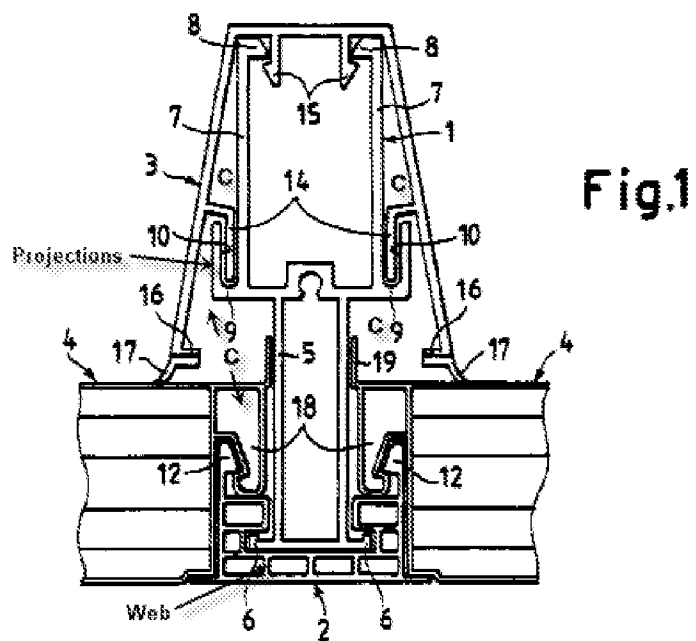
upper capping (32) therefor and means for locating (69) the capping on the bar, and wherein the glazing bar has a stem (48) and lateral flange means for supporting (40) roofing panels (24), and wherein the space within the capping between the stem and the roofing panel is divided into at least two chambers.



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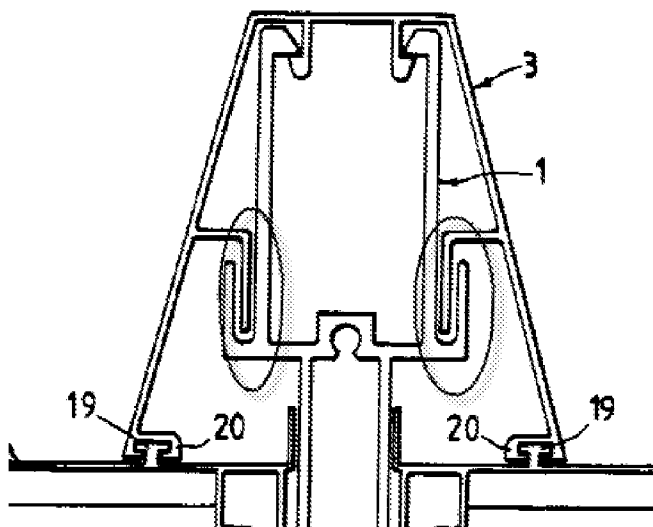
27. Claims 52-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Conterno (U.S. Patent No. 6,347,495).
28. Regarding claim 52, Conterno discloses in Fig. 1 a glazing bar (1) and an upper capping (3) therefor and means for locating (15) the capping on the bar, and wherein the glazing bar has a stem (7) and lateral flange means for supporting (2) roofing panels (4), and wherein the space within the capping between the stem and the roofing panel is divided into at least two chambers ("c").

29. Regarding claim 53, Conterno discloses “ducts” that are divided into inner and outer chambers (“c”).
30. Regarding claim 54, Conterno discloses a division that is by means of projections (Projections) formed on the stem and extending towards the inside wall of the capping.
31. Regarding claim 55, Conterno discloses a division that is formed by projections (14) that “depend” from the inside of the capping. The examiner considers the projections that are formed on the stem and depend on the capping to collectively contribute to the division.
32. Regarding claim 56, Conterno discloses projections (projections) that extend up to the stem (7).
33. Regarding claim 57, Conterno discloses in Fig. 6 a projections (14) that does not make physical contact with the stem(1). The examiner considers the clearance in the channel to be sufficient to prevent contact.
34. Regarding claim 58, Conterno discloses projections (projections) that branch from the stem and stop “short” of the capping.
35. Regarding claim 59, Conterno discloses projections that are arcuate. The examiner considers the portion of the projection that is arcuate in cross section to meet the limitation.



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Fig. 6



Claim Rejections - 35 USC § 103

36. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
37. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
38. Claims 6-7, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson (U.S. Publication No. 2001/0029708) in view of Francis (U.S. Patent No. 4,251,964).
39. Regarding claims 6 and 29, Richardson discloses a glazing bar and capping combination as set forth above but does not disclose an insulation material. However, Francis teaches in Fig. 3 that is known in the art to have insulation material (58) within a chamber to help maintain preferred temperature levels. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the chamber of Richardson with the insulation of Francis to help maintain desired temperature levels within a space.
40. Regarding claims 7 and 30, Richardson in view of Francis discloses an insulation

41. Claims 39, 44-51 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Richardson (U.S. Publication No. 2001/0029708) in view of Conterno (U.S. Patent No. 6,347,495).

42. Regarding claim 39, Richardson discloses in Fig. 1 a glazing bar and capping combination as set forth above, but does not disclose web elements between the inner and outer walls defining a plurality of chambers. However, Conterno teaches that it is known in the art to have web elements (Web) between inner and outer walls to help stiffen the cap. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the Lower cap of Richardson with the webs of Conterno to have a lower cap that is more structurally sound.
43. Regarding claim 44, Richardson discloses a glazing bar and capping combination as set forth in claim 25, including a duct on each side the glazing bar but does not disclose a two chamber in each duct. However, Conterno in Fig. 1 teaches that it is known in the art to have at least two chambers in a duct to help reduce cold spots and condensation. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the ducts of Richardson with the multitude of "chambers" of Conterno to produce a duct that is not susceptible to condensation and low undesirable temperatures.
44. Regarding claim 45, Conterno further discloses "ducts" that are divided into inner and outer chambers ("c").
45. Regarding claim 46, Conterno further discloses a division that is by means of projections (Projections) formed on the stem and extending towards the inside

wall of the capping.

46. Regarding claim 47, Conterno further discloses a division that is formed by projections (14) that “depend” from the inside of the capping. The examiner considers the projections that are formed on the stem and depend on the capping to collectively contribute to the division.
47. Regarding claim 48, Conterno further discloses projections (projections) that extend up to the stem (7).
48. Regarding claim 49, Conterno further discloses in Fig. 6 a projections (14) that does not make physical contact with the stem(1). The examiner considers the clearance in the channel to be sufficient to prevent contact.
49. Regarding claim 50, Conterno further discloses projections (projections) that branch from the stem and stop “short” of the capping.
50. Regarding claim 51, Conterno further discloses projections that are arcuate. The examiner considers the portion of the projection that is arcuate in cross section to meet the limitation.
51. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson (U.S. Publication No. 2001/0029708) and Conterno (U.S. Patent No. 6,347,495) as applied above, and in further in view of Francis (U.S. Patent No. 4,251,964).
52. Regarding claim 40, Richardson in view of Conterno discloses a glazing bar and capping combination as set forth in claim 39 above but does not discloses an insulation material. However, Francis teaches that is known in the art to have

insulation material within a chamber to help maintain preferred temperature levels. Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the chamber of Richardson and Conterno with the insulation of Francis to help maintain desired temperature levels within a space.

53. Regarding claim 41, Richardson in view Conerno in further view of Francis discloses an insulation material as set forth above but does not specify the insulation material being of foamed plastics. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a foam plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Foam would have been an obvious material choice since it efficient and cost effective. *In re Leshin*, 125 416
54. Claims 62-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conterno (U.S. Patent No. 6,347,495).
55. Regarding claim 62, Conterno discloses in Fig. 1 a glazing bar (1) and an upper capping (3) therefor and means for locating (15) the capping on the bar, and wherein the glazing bar has a stem (7) and lateral flange means for supporting (2) roofing panels (4), and wherein the space within the capping between the stem and the roofing panel is divided into at least two chambers ("c"), with the upper capping being of plastic materials, but does not disclose the glazing bar as being plastic. It would have been obvious to one having ordinary skill in the art at

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the time the invention was made to modify the glazing bar of Conterno with plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Plastic materials would have been an obvious choice for having great ductile and conductivity properties as needed. *In re Leshin*, 125 416

56. Regarding claim 63, Conterno further discloses “ducts” that are divided into inner and outer chambers (“c”).
57. Regarding claim 64, Conterno further discloses a division that is by means of projections (Projections) formed on the stem and extending towards the inside wall of the capping.
58. Regarding claim 65, Conterno further discloses a division that is formed by projections (14) that “depend” from the inside of the capping. The examiner considers the projections that are formed on the stem and depend on the capping to collectively contribute to the division.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES J. BUCKLE JR whose telephone number is

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(571)270-3739. The examiner can normally be reached on Monday-Thursday,
Alternating Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Chilcot
Examiner
Art Unit 3635

JJB

/Robert J Canfield/

Supervisory Patent Examiner, Art Unit 3635